TITLE: SYSTEM, METHOD AND COMPUTER
           PROGRAM PRODUCT FOR
           GATHERING AND DELIVERING
           PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
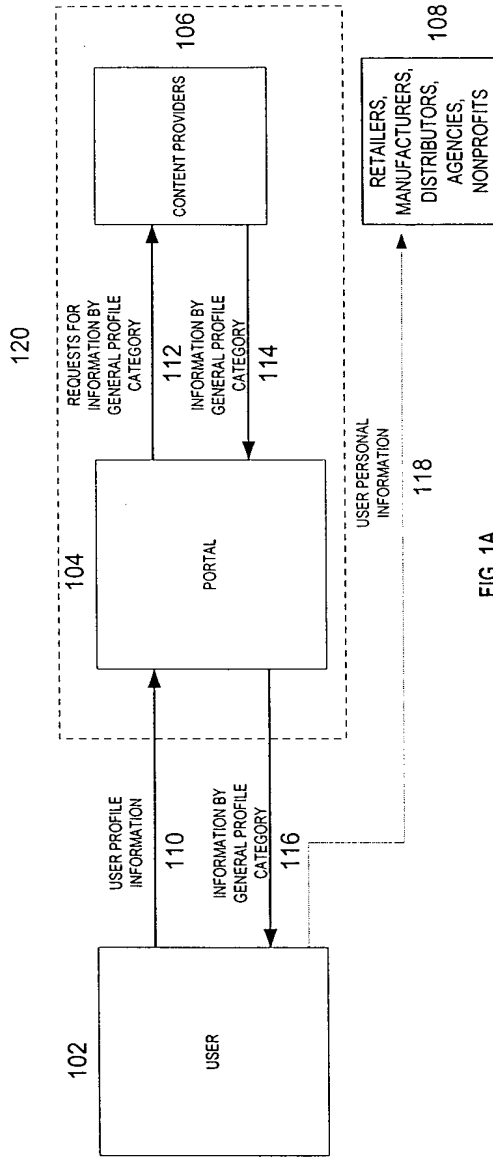APPLN NO.: 09/829,937
ATTY. DOCKET NO.: 35850-165999

FIG. 1A

FIG. 1B

TITLE: SYSTEM, METHOD AND COMPUTER
PROGRAM PRODUCT FOR
GATHERING AND DELIVERING
PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
APPLN NO.:   09/829,937
ATTY. DOCKET NO.: 35850-165999
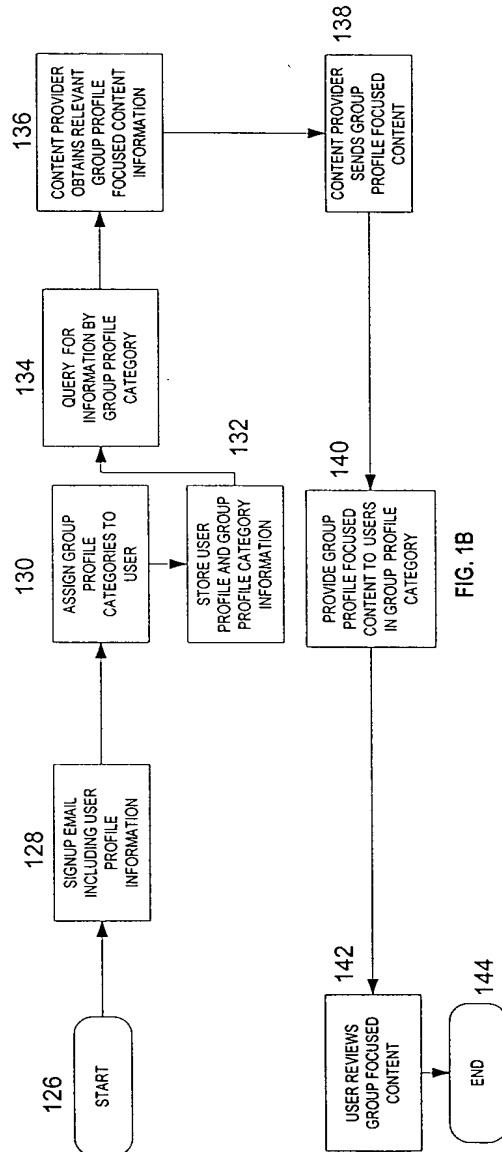
146

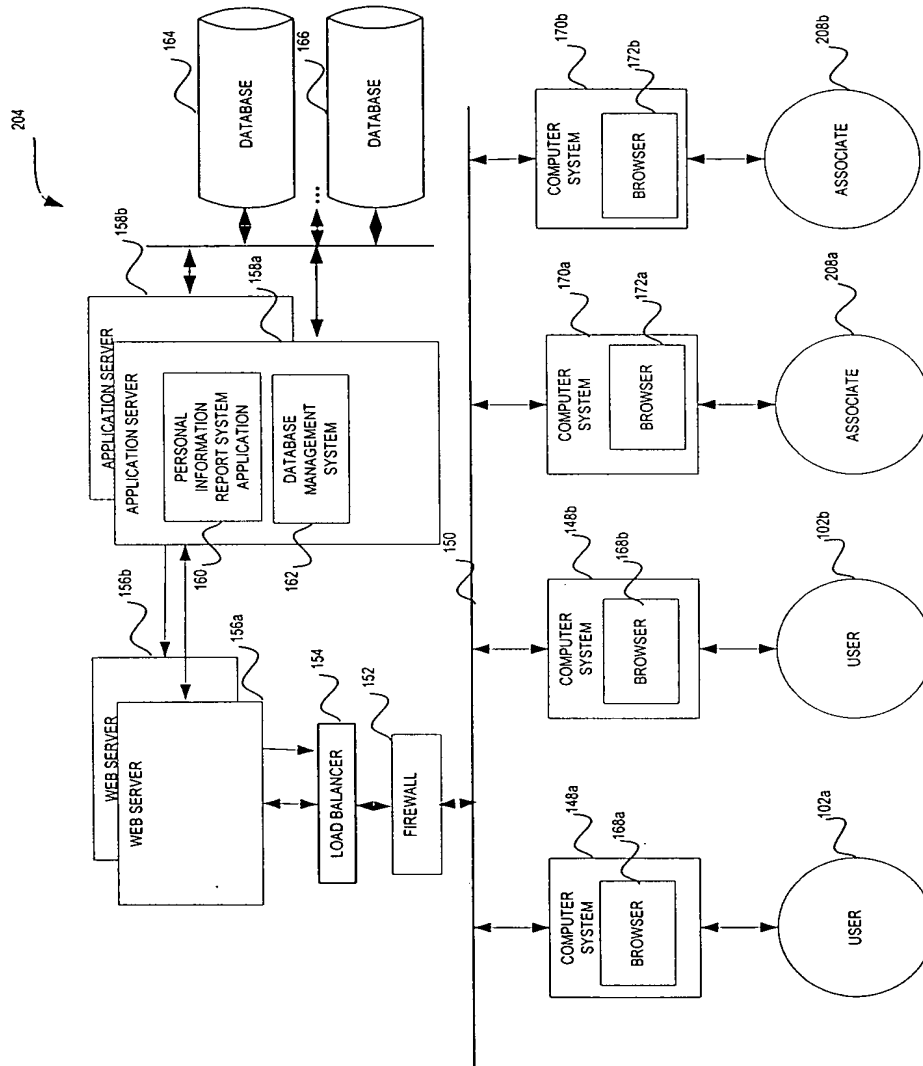FIG. 1C

TITLE: SYSTEM, METHOD AND COMPUTER
            PROGRAM PRODUCT FOR
            GATHERING AND DELIVERING
            PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
APPLN NO.: 09/829,937
ATTY. DOCKET NO.: 35850-165999

200

102 — USER

210 — PERSONAL USER PROFILE INFORMATION AND FAMILY DEFINITIONS

212 — CONVEYANCE TO SERVICE PROVIDER OF USER PROFILE REGISTRATION AND SHARING CONTROLS VIA (E.G., WEB, INTERACTIVE VOICE RESPONSE, WIRELESS DEVICE, INTERACTIVE TV)

108, 208 — RETAILERS, MANUFACTURERS, NON-PROFITS, AGENCIES

118 — CONVEYANCE OF PERSONAL USER PROFILE INFORMATION

202 — CONVEYANCE OF PROFILE UPDATES AND RELATED INFORMATION

204 — REAL-TIME SOCIAL NETWORK (RTSN) SERVICE PROVIDER

206 — PROVIDE CUMULATIVE AGGREGATE PROFILE INFORMATION BY ASSOCIATION, MANUFACTURER, AGENCY, NON-PROFIT

214 — AGGREGATE USER PROFILE INFORMATION

208a — AFFILIATED ASSOCIATION (CUSTOMERS OF RTSN SERVICE PROVIDER, E.G., MANUFACTURER)

216 — AGGREGATE USER PROFILE INFORMATION

208b — UNAFFILIATED ASSOCIATION (NON-CUSTOMERS OF RTSN SERVICE PROVIDER, E.G., NON-PROFIT)

218 — AGGREGATE USER PROFILE INFORMATION

208c — OTHER ASSOCIATION (E.G. GOV'T CONSUMER AGENCY)

220 — PERSONAL INFORMATION TO BE SHARED (E.G., CALENDAR, TO-DO LIST, PHONEBOOK, MESSAGES)

222a — ACCESS TO SHARED RESOURCE? Y

224a — FAMILY (E.G., IMMEDIATE RELATIVES)

222b — ACCESS TO SHARED RESOURCE? Y

224b — FAMILY (E.G., SOCIAL)

222c — ACCESS TO SHARED RESOURCE? Y

224c — FAMILY (E.G., WORK-RELATED, LAWYERS)

FIG. 2

TITLE: SYSTEM, METHOD AND COMPUTER
             PROGRAM PRODUCT FOR
             GATHERING AND DELIVERING
             PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
APPLN NO.:   09/829,937
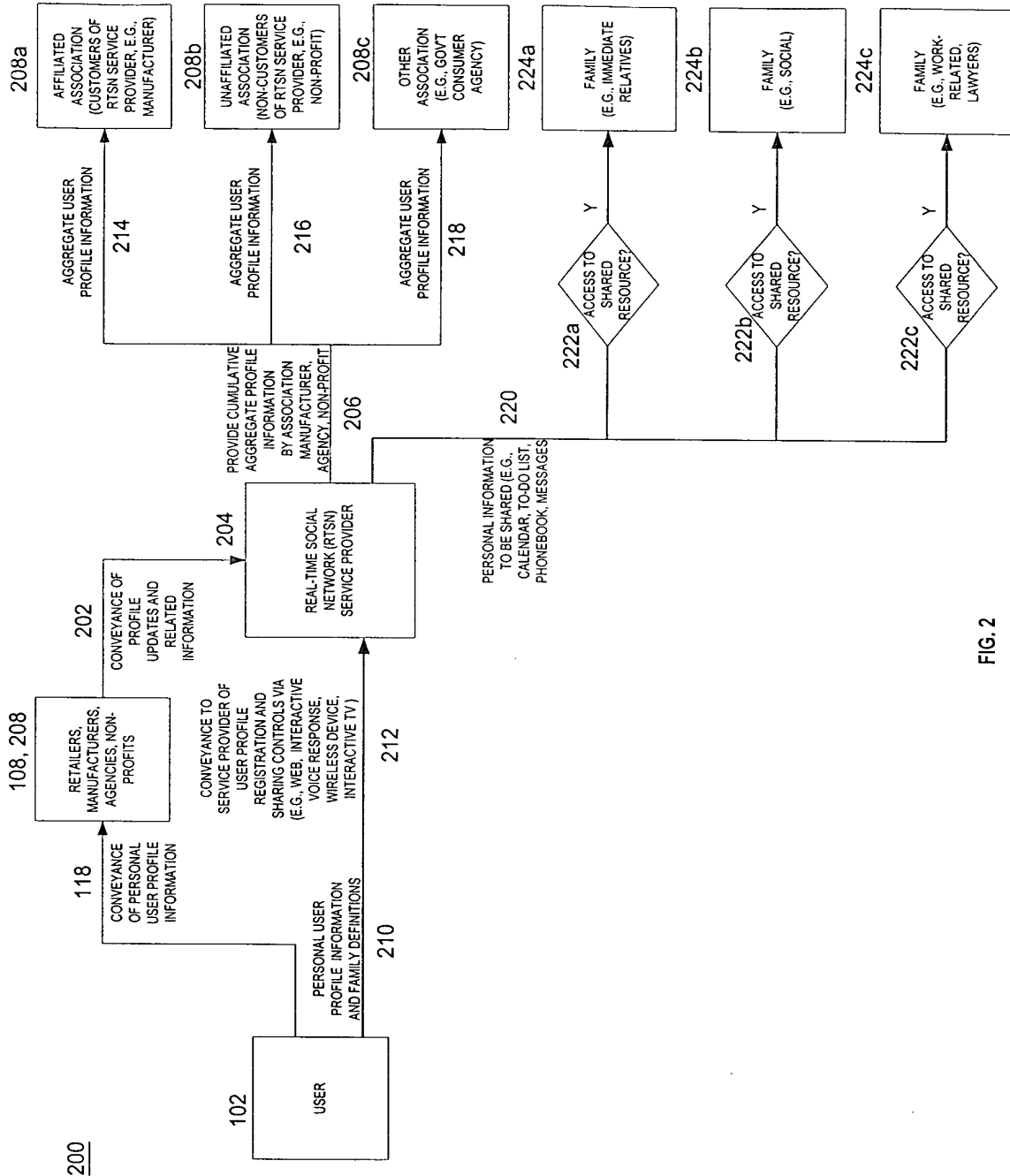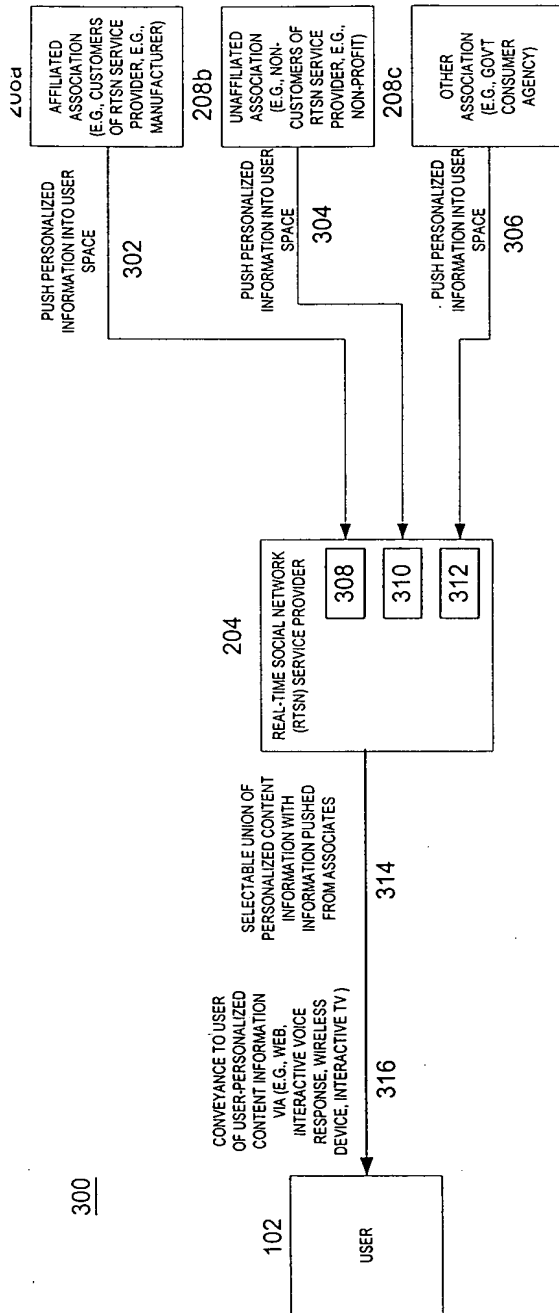ATTY. DOCKET NO.: 35850-165999

300

208a

AFFILIATED ASSOCIATION (E.G., CUSTOMERS OF RTSN SERVICE PROVIDER, E.G., MANUFACTURER)

208b

UNAFFILIATED ASSOCIATION (E.G., NON-CUSTOMERS OF RTSN SERVICE PROVIDER, E.G., NON-PROFIT)

208c

OTHER ASSOCIATION (E.G., GOV'T CONSUMER AGENCY)

PUSH PERSONALIZED INFORMATION INTO USER SPACE
302

PUSH PERSONALIZED INFORMATION INTO USER SPACE
304

PUSH PERSONALIZED INFORMATION INTO USER SPACE
306

204

REAL-TIME SOCIAL NETWORK (RTSN) SERVICE PROVIDER

308
310
312

SELECTABLE UNION OF PERSONALIZED CONTENT INFORMATION WITH INFORMATION PUSHED FROM ASSOCIATES
314

CONVEYANCE TO USER OF USER-PERSONALIZED CONTENT INFORMATION VIA (E.G., WEB, INTERACTIVE VOICE RESPONSE, WIRELESS DEVICE, INTERACTIVE TV)
316

102

USER

FIG. 3

TITLE: SYSTEM, METHOD AND COMPUTER
           PROGRAM PRODUCT FOR
           GATHERING AND DELIVERING
           PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
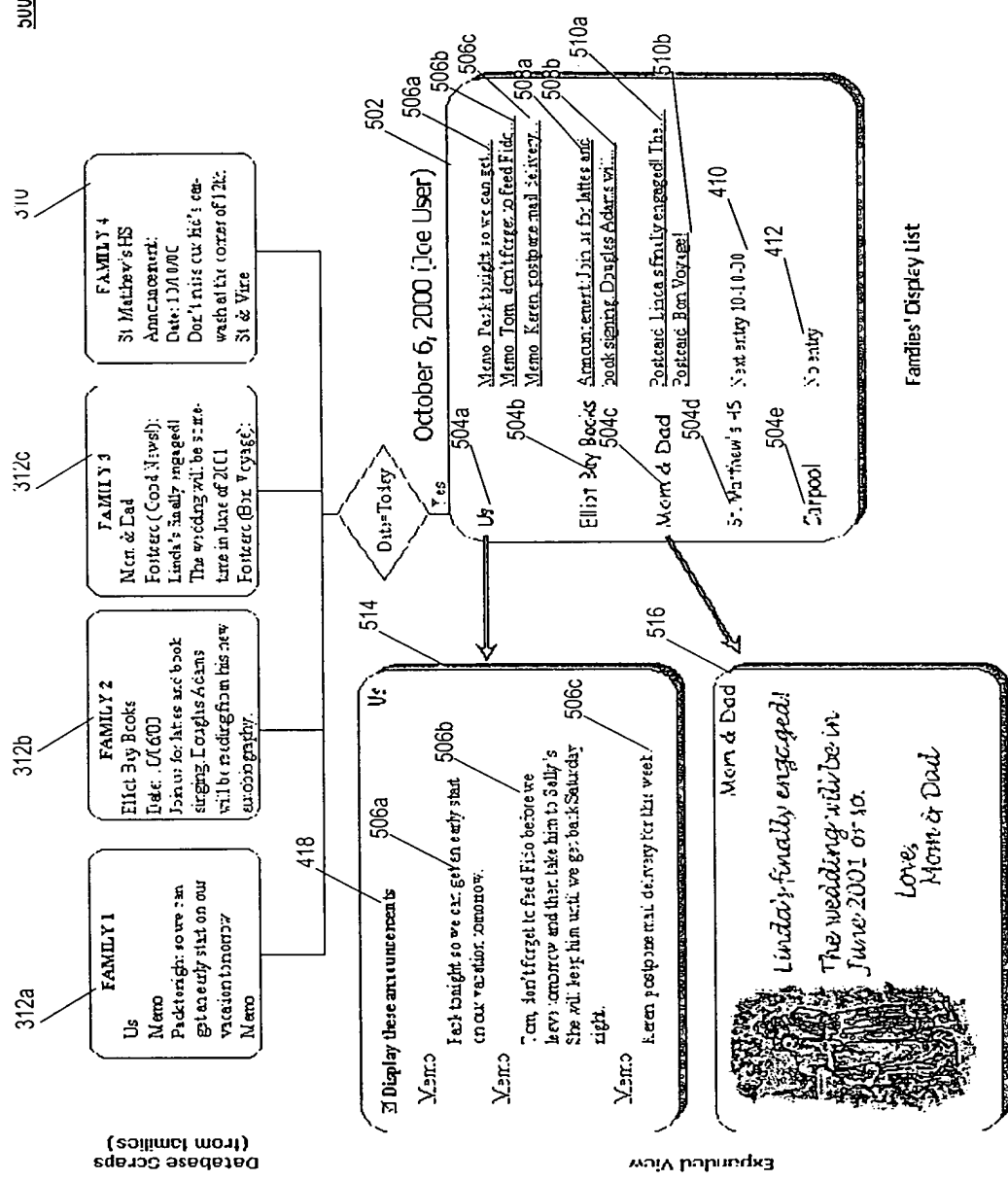APPLN NO.: 09/829,937
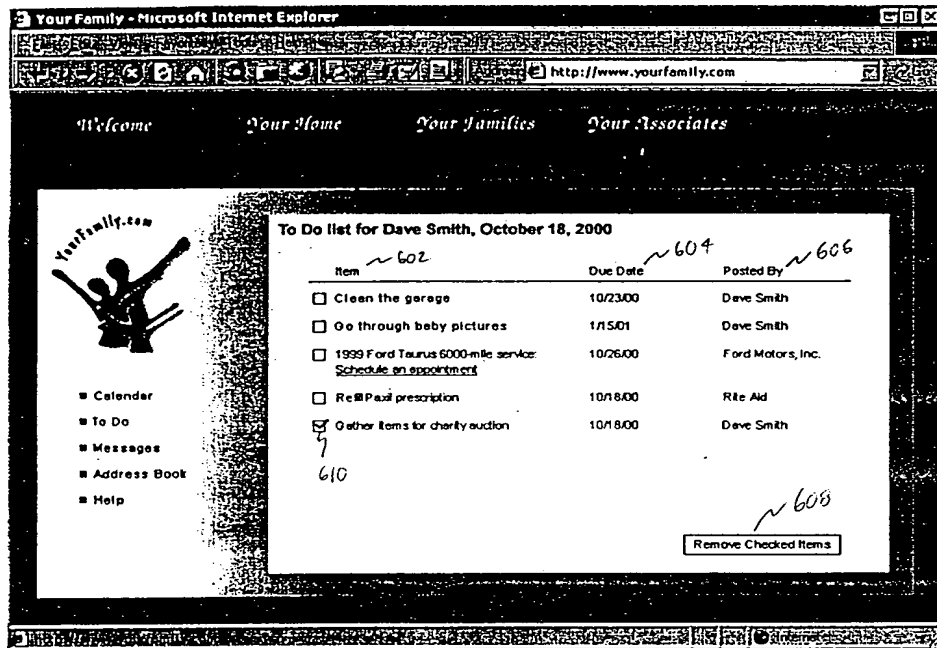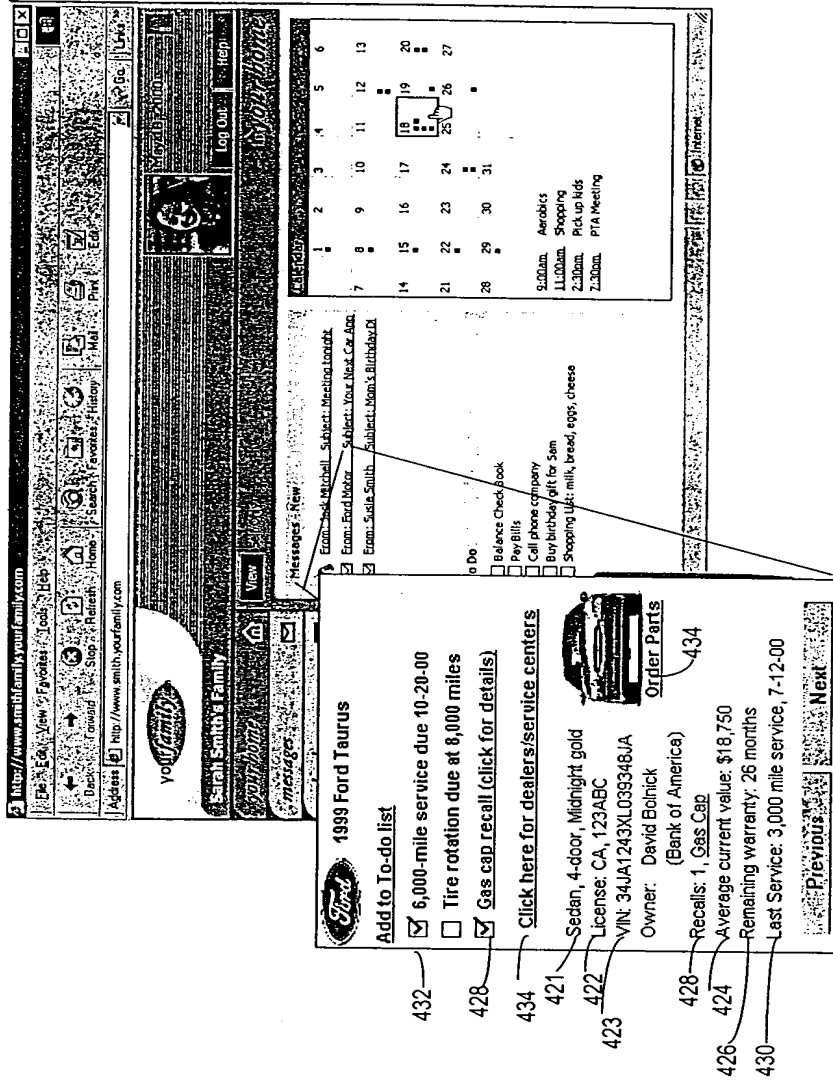ATTY. DOCKET NO.: 35850-165999

400

308e

EMPLOYER
INFORMATION

MICROSOFT
- NO NEW
INFORMATION

308d

ASSOCIATION 4

Seattle Primary School
Student #54321
Start: 10-06-00, 7:35pm
End: 10-06-00, 7:50pm
Parent/Teacher conf.
Mrs. Wilkerson, Rm 222

SPS

308c

ASSOCIATION 3

AT&T
Acct: 123456790
Date: 10-21-00
October Statement

AT&T

308b

ASSOCIATION 2

RiteAid Pharmacy
Rx :2345, Diabinese 250mg
Start: 10-4-00
Refil due (1): 11-7-00
☺ Take 1 tablet at breakfast,
lunch, dinner

RITE AID

308a

ASSOCIATION 1

1999 Ford Escort
Lic. CA 123ABC
Start: 09-15-00
End: 10-15-00
6,000 Mile Service

Ford

Database Scraps
(from associates)

402

October 6, 2000 (Joe User)

Date=Today   Yes

Ford   406a
1999 Ford Escort: 6,000 Mile Service   408a
Click here to schedule appointment
                                         406b
                                         408b
☺ Take 1 tablet at breakfast, lunch, dinner
Time for refill (click here to order)   410

RITE AID
Next entry 10-21-00   408c
Download last statement   409c
3 New Voice Messages   406d
Parent/Teacher conf   408c
7:35-7:55pm Mrs. Wilkerson Rm 222   406d
Click here to download report card   408d

AT&T

SPS

Microsoft   No entry   412

Associates' Display List

404a   **404b**   **404c**   **404d**   416   **404e**

418   420

Ford   1999 Ford Escort SE Sedan 4D   423
☑ Display events on my calendar
☐ Display promotional announcements   421
422
License: CA 123ABC
VIN: 54A1243XL039324JA   424
Average current value $12,350   426
Remaining warranty: 30 months
Recalls: none   428
Last service: 3,000 Oil Change, 1-12-00   430
➤Service due: 6,000 Mile Service   432
Click here for Local Dealers/Service Centers   434
422

414

418
☑ Display events on my calendar   438
RITE AID   Rx 12345, Diabinese 250mg #:20   440 442 444
Start: 10-04-00 End: 11-09-00
Take 1 tablet at breakfast, lunch, dinner   446
Refills: 1 remaining 1:-7-00   448
Dr. Sucrose Ph 310-355-1212
                                         450
Rx 12002, Doxycycline 100mg, #7   452
Start: 6-23-99 End: 6-29-99
Take 1 capsule after breakfast   454
Refills: 0

436b
436a

Expanded View

Figure 1. Associates' Data Flow Schematic

FIG. 4

500

Database Scraps (from families)

FAMILY 1 — 312a
Us
Memo
Packed rights so we can get an early start on our vacation tomorrow.
Memo

FAMILY 2 — 312b
Elliot Bay Books
Date: 10/6/00
Join us for lattes and book signing Douglas Adams will be reading from his new autobiography.

FAMILY 3 — 312c
Mom & Dad
Postcard (Good News): Linda's finally engaged! The wedding will be sometime in June of 2001
Postcard (Bon Voyage):

FAMILY 4 — 310
St Matthew's HS
Announcement:
Date: 10/10/00
Don't miss our kid's carwash at the corner of 12th. St & Vine

Date=Today
Yes

October 6, 2000 (Joe User) — 502

Us — 504a
Memo Packed tonight so we can get... — 506a
Memo Tom don't forget to feed Fido — 506b
Memo Karen postpone mail delivery... — 506c

Elliot Bay Books — 504c
Announcement Join us for lattes and — 508a
book signing Douglas Adams wi... — 508b

Mom & Dad — 504d
Postcard Linda's finally engaged! The... — 510a
Postcard Bon Voyage! — 510b

St Matthew's HS — 504e
Next sale: 10-10-00 — 410

Carpool — 412

Families' Display list

418

514

Us
☑ Display these announcements
506a
Memo
Packed tonight so we can get an early start
on our vacation tomorrow.
506b
Memo
Tom, don't forget to feed Fido before we
leave tomorrow and that I take him to Sally's.
She will keep him until we get back Saturday
night.
506c
Memo
Karen postpone mail delivery for this week.

516

Mom & Dad

Linda's finally engaged!
The wedding will be in
June 2001 or so.

Love,
Mom & Dad

Expanded View

FIG.5

Figure 2. Families Data Flow Schematic

TITLE: SYSTEM, METHOD AND COMPUTER
PROGRAM PRODUCT FOR
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PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
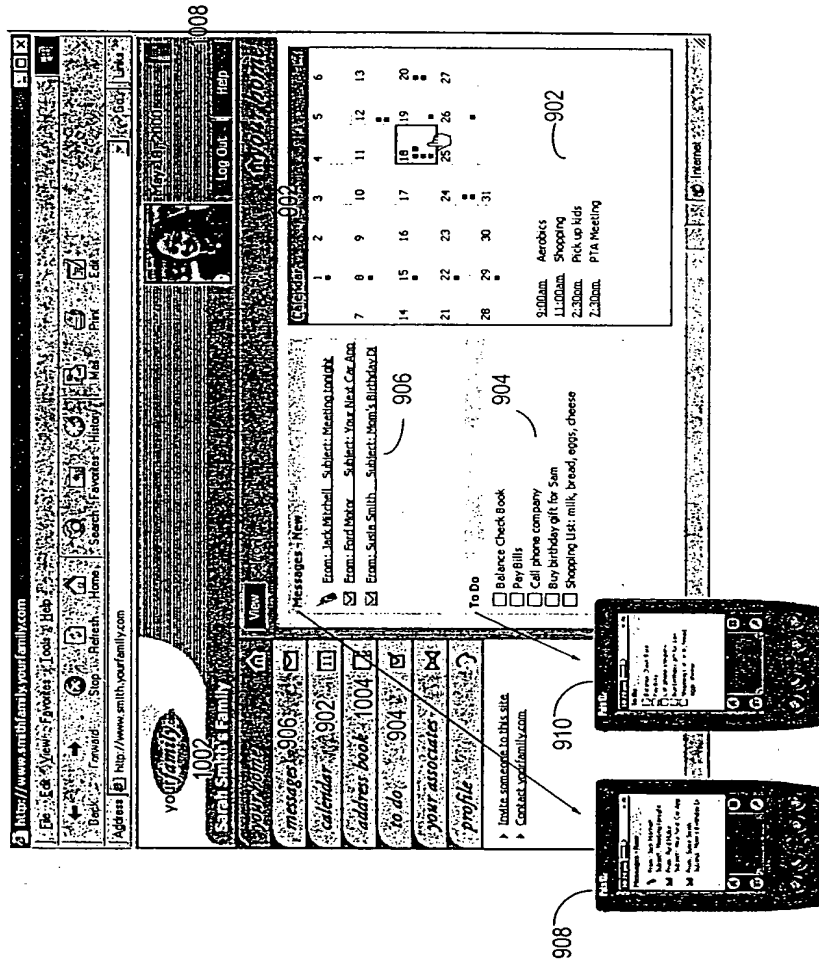APPLN NO.: 09/829,937
ATTY. DOCKET NO.: 35850-165999

600

Your Home (To-do view)

FIG. 6

700

ASSOCIATE PROVIDERS (ASSOCIATES LIST VIEW)

FIG.7

800
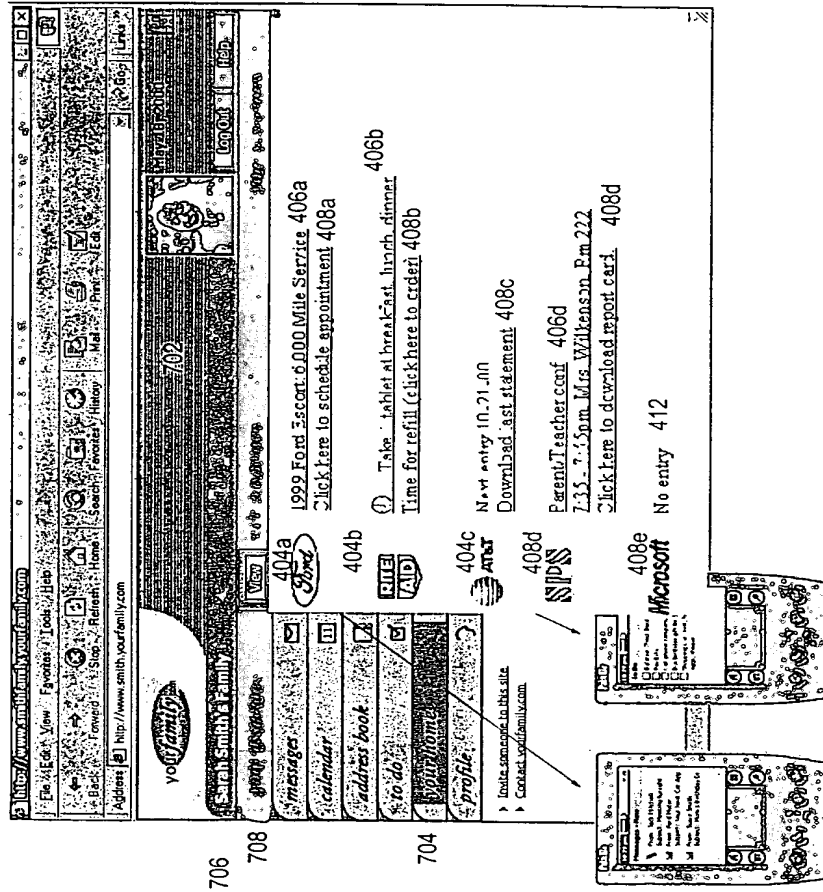
ASSOCIATE PROVIDER POP-UP (PERSONALIZED CUSTOMER INFORMATION)

FIG. 8

TITLE: SYSTEM, METHOD AND COMPUTER
             PROGRAM PRODUCT FOR
             GATHERING AND DELIVERING
             PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
APPLN NO.:   09/829,937
ATTY. DOCKET NO.: 35850-165999

FIG. 9

TITLE: SYSTEM, METHOD AND COMPUTER
             PROGRAM PRODUCT FOR
             GATHERING AND DELIVERING
             PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
APPLN NO.: 09/829,937
ATTY. DOCKET NO.: 35850-165999

1000

902

904

FIG. 10

TITLE: SYSTEM, METHOD AND COMPUTER
           PROGRAM PRODUCT FOR
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           PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
APPLN NO.: 09/829,937
ATTY. DOCKET NO.: 35850-165999

1100

PROCESSOR

1102

MAIN MEMORY

1106

MOUSE

1116

KEYBOARD

1118

BUS

1104

DISPLAY

1120

NETWORK INTERFACE CARD
(NIC)

1122

MODEM

1124

SECONDARY MEMORY

1108

STORAGE DEVICE

1110

REMOVABLE
STORAGE DEVICE
1112

REMOVABLE
STORAGE MEDIA

1114

LAN/
WAN/
ROUTER/
INTERNET

FIG. 11

FIG. 12

FIG. 13A

Redundant Security Transport (RST) 1337

PIR Scraps 1338

Service Center Server 1340

ID="09990827AC"
Link-disp="6,000-mile service due 10-20-00"
Link-href="www.ford.com/service/centers/"
End

Recalls & Fulfillment Server 1342

ID="09990827AC"
Link-disp="Gas cap recall due now (click for details)"
Link-href="www.ford.com/recall/45893"
End

118

Ford/ Katav Process & Routing Server

Encrypt & Send to Katav 1344

1. Data Collected, Compiled, and Encrypted

Firewall 152

2. Data sent via Secure Tunneling Protocol

Secure PPTP (Point-to-Point Tunneling Protocol) 1346

3. Data Encrypted Again at Katav 1348

Stored Encrypted 158

Katav's Process & Routing Servers

1350

4. Data Distributed via SSL link

SSL (Secure Sockets Layer Protocol)

5. Data Stored Encrypted on User Devices 1352

Stored Encrypted

148a

Decrypt & Display Window 1354

6. Data Decrypted when Displayed

David Bolnick: Ford - Personal Information Report

TIP of the Week: It is dangerous to use your high-beam headlights when driving in fog. Use your low-beams and optional Philco Fog Lights for best visibility.

Add to To-do list
☑ 6,000-mile service due 10-20-00
☐ Tire rotation due at 8,000 miles
☑ Gas cap recall due now (click for details)

Click here for local dealers/service centers

Take our customer satisfaction survey and your next oil change is on us [click here]

1999 Ford Taurus
Sedan, 4-door, Midnight gold
License: CA, 123 ABC
VIN: 34JA1243XL03934BJA
Owner: David Bolnick

Recalls: 1: Gas Cap
Average current value: $18,750
Remaining warranty: 26 months
Last service: 3,000 mile oil change, 7-12-00

Order: 1999 Taurus Parts

1308

FIG. 13B

TITLE: SYSTEM, METHOD AND COMPUTER
PROGRAM PRODUCT FOR
GATHERING AND DELIVERING
PERSONALIZED USER INFORMATION
INVENTOR: David A. BOLNICK et al.
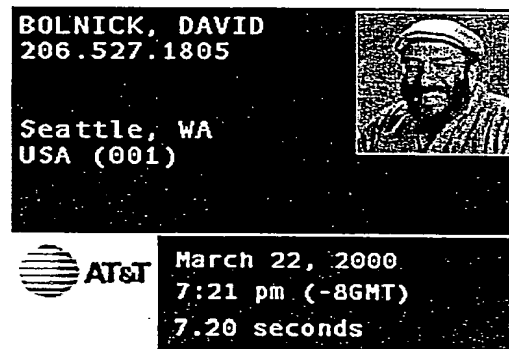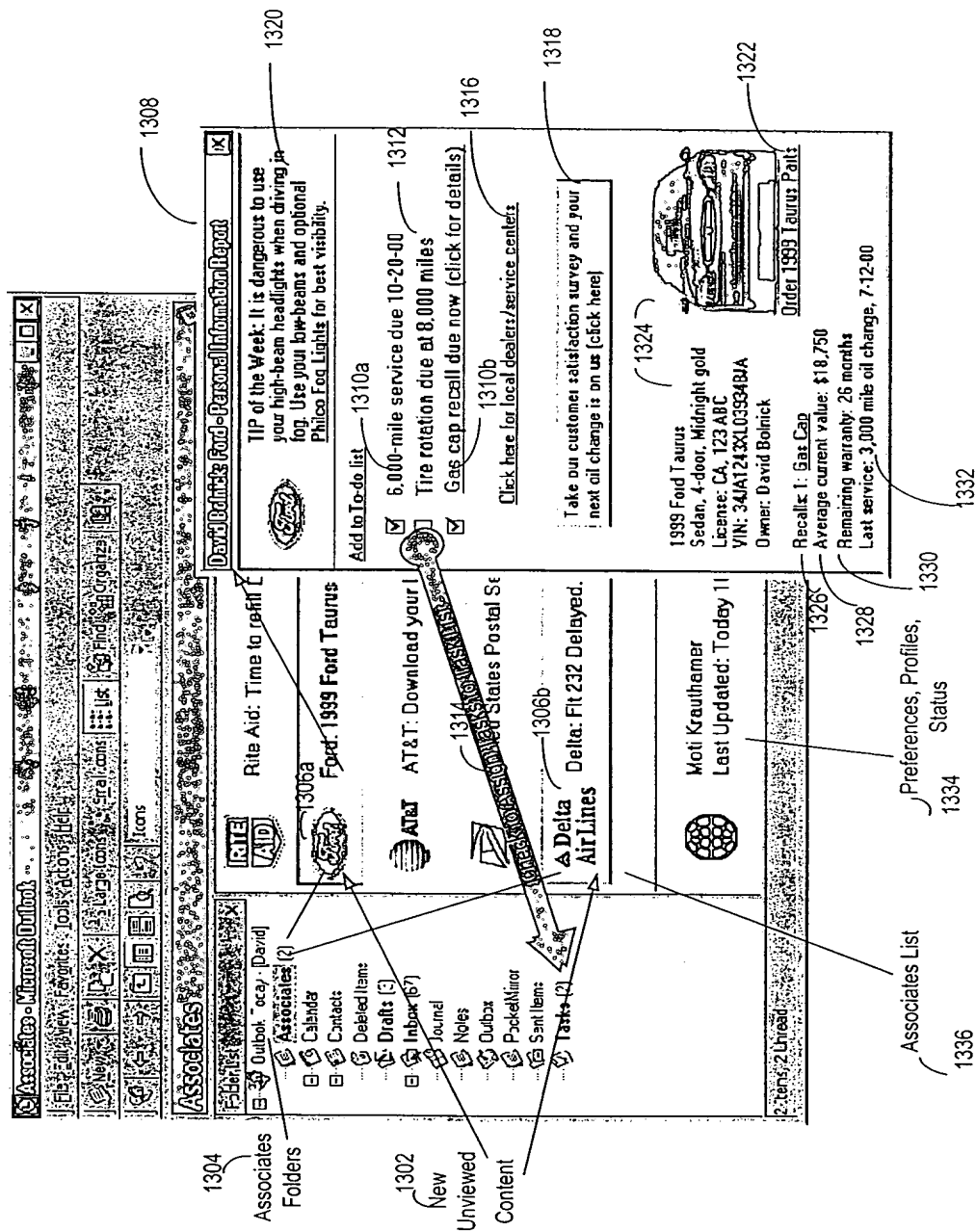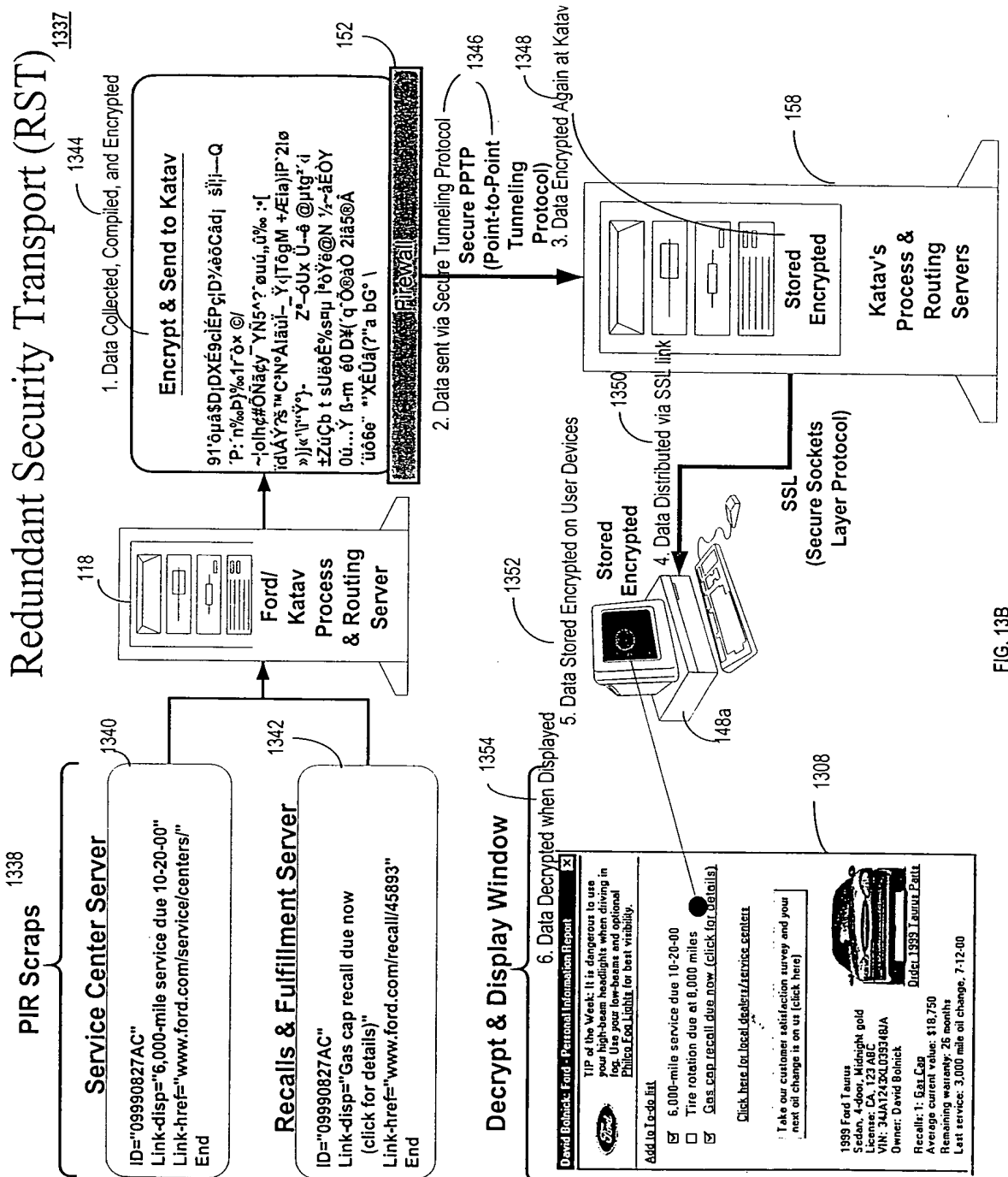APPLN NO.: 09/829,937
ATTY. DOCKET NO.: 35850-165999

FIG. 14

Access on Windows Desktop

1500

1506

1508

1504

1502

1510

Delta PIR: Moti Krauthamer

△Delta
delta.com

SkyMiles

Moti Krauthamer

Account: 034920AB   SkyMiles: 255,000 Miles

| Reservations | Specials | Profile |

Add to Calendar

☑ Depart: Tue, Oct 31, 11:00am, Flt 232, SeaTac Airport
☑ Arrival: Same day, 2:00pm, San Francisco International
☐ Car Rental: Tue, Oct 31, Avis [234034] Buick Skylark

Add to To-do list

☐ Earn 5000 miles by taking our customer satisfaction
survey by the end of November 2000 [click here]
☑ Make hotel reservation for Oct 31 travel

Tuesday, October 31, 2001

✈ Depart: 11:00am Flt 232 SeaTac Airport
Check in: Required - 45 minutes before departure
Seat: 2B Reserved
Upgrade: First Class [Cleared], 2000 SkyMiles
Meals: Special [Vegetarian]

1512

1514

1516

PIR - Moti Krauthamer
File View Tools Help

Associates

RITE AID Rite Aid Awards Member

AT&T AT&T Telecommunications

United States Postal Service

△Delta Air Lines Delta Airlines: Exec Flyer

Moti Krauthamer
Last Updated: Today 10:34am

Display My Accounts

Update My Accounts
Properties
Exit

Start PIR - Moti Krauthamer   10:00 AM

FIG. 15

1600

Access on (IFE) Portals...

1602

/// UNITED

Personal Information Reports

1604

RITE AID — Paxil--Take 1 tablet at breakfast, lunch, and dinner:
Order a refill

Ford — 1999 Ford Taurus 6000-mile service:
Schedule an appointment

AT&T — Download your last statement

SPS — Parent/Teacher conference: 7:35
Download your report card

Personal Finance

MoneyCentral Stock Quotes

Fidelity Investments Datek Online Patagon.com USA ETRA

Symbol	Name
$INDU	Dow Jones Industrials Index
$XAX.X	Amex Composite Index
$COMPX	Nasdaq Combined Composite Index
$INX	S&P 500 INDEX

update

News Market Report Top 10 Lists

get quotes get chart

Find symbol

Local Lookups

Yellow Pages
White Pages

1606

Sarah Smith: Rite Aid - Personal Information Report

Edit X

✓ Display events on my calendar 1608

Customer number: 00002529573
Store: Wedgwood 206-555-1212
8432 - 35th Ave. NE
Seattle, WA 98115 1610

Rx 345878 Doxycycline 100mg 7 Caps 436c

Rx 340101 Diabinese 250mg 120 Tabs 436d

Rx History 1612

✗ Coupons & Store Specials 1614

Rx 345878 Doxycycline 100mg 7 Caps 1616

Filled: 23 August 2000
Dr. M. Wellsby, MD   Ph: 310-555-1212 1624
1618

⏰ Take:
1 cap in morning 1620a

☞ Take with plenty of water 1620b

☞ Consult your physician before
discontinuing this mediation 1622

✱ Refills: 1 Next due 10 October 2000

FIG. 16

1700

1702

FIG. 17